	Application No.	Applicant(s)
Nation of Allowahility	10/758,035	KIM ET AL.
Notice of Allowability	Examiner	Art Unit
	Louis Falasco	1794
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>8/10/07</u> .		
2. The allowed claim(s) is/are 1 and 5-9.		
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some* c) None of the:</li> <li>1.  Certified copies of the priority documents have been received.</li> </ul>		
2. Certified copies of the priority documents have been received in Application No		
3.  Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal P 6. ☑ Interview Summary Paper No./Mail Dat 7. ☑ Examiner's Amendr 8. ☑ Examiner's Stateme 9. ☐ Other	(PTO-413), te <u>23 Oct, 2007</u> .

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## Examiners' Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

## Amend claim 1:

On line 7 DELETE "serves" and INSERT -- being operative -- in its place.

On line 8 DELETE "to" and INSERT -- subsequently -- in its place.

On line 9 DELETE "be".

On line 9 after "," INSERT -- wherein, the protection layer is made of a non-magnetic substance, and wherein: the protection layer is a carbon layer. --.

# CANCEL claims 3, 4, 8 and 9

### Add new claims 10 and 11:

- **10**. A disk as claimed claim 1, wherein: the carbon comprises an amorphous carbon.
- **11.** A disk substrate as claimed in claim 1, wherein the carbon comprises hydrogenated carbon.

#### Authorization

Authorization for this examiner's amendment was given in a telephone interview with examiner Lou Falasco on 11/05/07.

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Examiners Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

The primary reason for allowance of the claims is that this is a disk substrate where a soft magnetic layer directly on the disk base and amorphous layer, that is a carbon, is formed on top of the soft magnetic layer. The amorphous layer operates to reduce grain size of a subsequently formed underlayer, the subsequently formed underlayer that controllers grain size and orientation of a perpendicular magnetic recording layer.

Sato et al (newly cited - US 2002/0186506) teaches the amorphous carbon layer however fails to suggest a soft magnetic layer on the substrate as the soft magnetic nor is the Sato et al structure a disk substrate *per se*.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **CONCLUSION**

• All claims have been allowed with Examiners Amendment

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*Inquires* 

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis Falasco, PhD whose telephone number is (571)272-1507. The examiner can normally be reached on M-F 10:30 - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached at (571)272-1398. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ス./ LF 11/07

CAROL CHANEY '
SUPERVISORY PATENT EXAMINER